U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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COPPER IN JUNE 1996

The daily average copper mine production rose to a record high level in June, eclipsing the record set in August 1995. Primary refinery production, on the other hand, fell by 11%. Shutdown of a major smelter in May for scheduled maintenance resulted in a shortfall of anode available for refining in June. Inventories of unrefined copper (table 11) declined for the second consecutive month.

Reported consumption of refined copper and production of wire rod also declined in June. Despite the decline in production, inventories of rod at wire rod mills rose, reflecting weak down-stream demand heading into the traditionally slow summer months. Reported consumption of refined copper during the first 6 months of 1996 was essentially unchanged from the equivalent period in 1995. According to Bureau of the Census data, as compiled by the Copper and Brass Fabricators Council, net imports of copper and copper alloy products during the first 6 months of 1996 were 42 million pounds, down from 162 million pounds during the equivalent period in 1995.

Copper prices plummeted in June following revelations that Sumitomo Corp. had sustained losses in excess of \$1.8 billion on unauthorized copper trades by the head of its copper trading unit. By the first week in July, the spot Comex price had fallen to below \$.90 per pound for the first time in over 2 years. Though fluctuating on a daily basis, the spot price mostly traded within a 5-cent-per-pound range through July, reaching a low of \$.86 per pound, but averaging \$.91 for the month. Prices edged upward in August, with

spot copper trading between \$.90 and \$.95 per pound. Though markets clearly responded in the short-term to Sumitomo's losses, it was unclear what the long-term impact on prices would be. Many analysts believe that prices are poised to fall as new capacity coming on stream is expected to generate surplus copper. Sumitomo's large copper holdings may have helped to prop up prices in the months proceeding the revelations, and concern over their potential release to the market may be having a depressing effect on near-term prices. According to data compiled by the International Copper Study Group, there was a slight apparent deficit in the world supply demand balance for the first 5 months of 1996. Forecasts by the Study Group indicate a slight surplus during the second half of the year, and a growing surplus in 1997.

Several labor contracts expired in June without disruption to production. ASARCO Incorporated announced that it had reached a new 6-year contract with the United Steelworkers of America (USW) that will coveralmost 1,000 employee's at the company's Ray Mine, concentrators, and solvent extraction-electrowinning plant. The agreement reportedly included wage and pension benefit increases. Though Phelps Dodge Corp.'s contract with the USW at its Chino Mine in New Mexico expired on June 30, workers remained on the job. Negotiations, which broke off late in July, resumed again in late August. Phelps Dodge was reportedly seeking a 6 1/2-year contract that called for no wage or pension benefit increases.

Arimetco International Inc. announced that it had

completed the purchase of the Sullivan property, near Gabbs, NV, which contains about 15 million tons of ore grading 0.34% copper. Arimetco was seeking permits for mining of the orebody and construction of a solvent extraction-electrowinning plant.

The International Copper Study Group published a Directory of Copper Mines and Plants that is available to the public for \$150. According to the

directory, world mine capacity at operating and developing mines is expected to increase from 11.85 million metric tons in 1996 to 14.08 million tons in 2000. An additional 1.7 million tons of capacity is in the exploration or feasibility stages of development. Smelter and refinery capacities are projected to increase from 13.1 million tons to 15.26 million tons, and from 14.2 million tons to 16.2 million tons, respectively, over the same time period.

${\bf TABLE~1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless noted)

				1996	
	Source				January-
	table 2/	1995 p/	May	June	June
Production:					
Primary:					
Mine, recoverable	(2)	1,850,000	157,000 r/	161,000	922,000
Smelter 3/	(3)	1,240,000 r/	94,300 r/	107,000	628,000
Refinery:					
Electrolytic:					
Domestic	(4)	1,310,000	112,000 r/	99,700	663,000
Foreign	(4)	77,300	9,500	5,180	55,300
Electrowon	(4)	525,000 r/	50,400 r/	48,300	282,000
Total	(4)	1,920,000	172,000 r/	153,000	1,000,000
Secondary recoverable copper:					
Refineries	(5)	319,000	26,800 r/	28,200	151,000
Ingot makers 4/	(5)	128,000	10,600	10,600	63,800
Brass and wire-rod mills	(5)	713,000	63,300	63,700	369,000
Foundries, etc.	(5)	58,500	4,880	4,880	29,300
Consumption:					
Total apparent	(8)	2,490,000 r/	276,000	NA	NA
Refined (reported)	(7)	2,530,000	237,000 r/	218,000	1,330,000
Purchased copper-base scrap	(9)	1,650,000	143,000	149,000	837,000
Stocks at end of period:					
Total refined	(11)	164,000	148,000 r/	141,000	XX
Blister, etc.	(11)	174,000	163,000 r/	158,000	XX
Prices:					
U.S. producer cathode					
(cents per pound)	(12)	138.333	126.667	107.828	120.019
Imports:					
Ores and concentrates 5/	(14)	127,000	20,000	NA	NA
Refined	(14)	429,000	56,800	NA	NA
Exports:		•	•		
Ores and concentrates 5/	(15)	239,000	21,500	NA	NA
Refined	(15)	217,000	10,800	NA	NA

p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

 ${\bf TABLE~2}$ MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES 1/

(Metric tons)

	1995 p/ 2/								
State	May	June	July	August	September	October	November	December	
Arizona	99,400	101,000	98,700	100,000	102,000	104,000	101,000	105,000	
Others 3/	59,000	59,700	61,400	63,700	56,300	51,200	46,300	45,800	
Total	158,000	160,000	160,000	164,000	159,000	155,000	148,000	151,000	
	1995 p/ 2/				1996				
State	Year total	January	February	March	April	May r/	June	Jan June	
Arizona	1,190,000	104,000	93,000 r/	108,000	103,000 r/	107,000	107,000	622,000	
Others 3/	663,000	47.800	45,000	52,200	50.700	50.500	54,000	300.000	

160,000

154,000 r/

157,000

161,000

922,000

152,000

^{1/} Data are rounded to three significant digits, except prices; may not add to totals shown.

^{2/} Numbers in parentheses refer to the detailed tables where these data are located.

^{3/} From domestic and foreign ores.

 $^{4/\,\}text{Data}$ no longer collected monthly; 1995 and 1996 data estimated based on 1994 monthly average.

^{5/} Copper content.

Total 1,850,000 p/ Preliminary. r/ Revised.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Monthly data and the 1995 "Year total" excludes production by companies reporting on an annual basis.

^{3/} Includes production from Idaho, Michigan, Missouri, Montana, Nevada, New Mexico, Utah, and Wisconsin.

 ${\bf TABLE~3}$ COPPER 1/ PRODUCED AT SMELTERS IN THE UNITED STATES, BY SOURCE 2/

(Metric tons, copper content)

	Domestic and		
Period	foreign ores	Scrap	Total
1995: p/			
June	87,200 r/	28,900	116,000 r/
July	103,000 r/	27,800	131,000 r/
August	101,000 r/	29,000	130,000 r/
September	100,000 r/	28,700	129,000 r/
October	114,000	33,900	148,000
November	105,000	33,700	139,000
December	106,000	35,100	141,000
JanJun.	614,000	170,000	784,000
Year total	1,240,000 r/	358,000	1,600,000 r/
1996:	-		
January	113,000 r/	29,200 r/	142,000
February	108,000 r/	29,800 r/	138,000
March	101,000	33,300 r/	134,000
April	105,000 r/	28,200 r/	133,000
May r/	94,300	30,600	125,000
June	107,000	30,400	135,000
JanJun.	628,000	182,000	807,000

p/ Preliminary. r/ Revised.

 ${\bf TABLE~4}$ PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

		Primary m	aterials			Scrap		
	Electrolytica	ally			Electro-	-		
	refined 2	2/			lytically	Fire		Total
Period	Domestic 3/	Foreign	Electrowon	Total	refined 2/	refined	Total	refined
1995: p/								
June	107,000 r/	7,210	42,900 r/	157,000 r/	16,900	8,110	25,000	182,000 r/
July	106,000	6,510	43,400 r/	156,000 r/	15,400	3,370	18,700	175,000
August	110,000	8,440	47,300 r/	166,000 r/	15,900	9,190	25,100	191,000 r/
September	105,000	6,570	48,100 r/	160,000 r/	16,300	9,140	25,400	185,000
October	109,000	8,490	49,800 r/	167,000	16,000	8,950	25,000	192,000
November	116,000	6,330	48,700 r/	171,000	16,100	10,100	26,200	198,000 r/
December	112,000	7,340	49,600 r/	169,000	16,000	8,350	24,400	194,000 r/
JanJun.	654,000	33,600	238,000	925,000	119,000	55,500	174,000	1,110,000
Year total	1,310,000	77,300	525,000 r/	1,920,000	215,000	105,000	319,000	2,230,000 r/
1996:								
January	117,000	11,300	47,300 r/	176,000 r/	14,300	10,700	25,000	201,000 r/
February	107,000	9,990	43,300 r/	160,000	13,700	10,000	23,700	184,000 r/
March	112,000	9,570	45,700 r/	167,000	14,200	11,300	25,500	193,000 r/
April	115,000 r/	9,790	47,100 r/	172,000 r/	14,200 r/	7,690	21,900 r/	194,000 r/
May	112,000 r/	9,500	50,400 r/	172,000 r/	16,900 r/	9,950	26,800 r/	198,000 r/
June	99,700	5,180	48,300	153,000	17,300	10,900	28,200	181,000
JanJun.	663,000	55,300	282,000	1,000,000	90,600	60,600	151,000	1,150,000

p/ Preliminary. r/ Revised.

^{1/} Includes blister, anode and black copper from primary or secondary sources.

^{2/} Data are rounded to three significant digits; may not add to totals shown.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Based on source of material at smelter level.

^{3/} Includes fire-refined copper.

 ${\bf TABLE~5}$ COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASED SCRAP 1/

(Metric tons, copper content)

					Brass an				
	Refineries	2/	Ingot make	ers 3/	wire-rod m	ills	Foundries,	etc. 4/	
Period	New scrap	Old scrap	Total 5/						
1995: p/									
June	9,320	15,700	2,840	7,790	57,200	4,200	2,130	2,750	102,000
July	5,160	13,600	2,840	7,790	46,200	3,690	2,130	2,750	84,100
August	9,750	15,300	2,840	7,790	51,900	4,060	2,130	2,750	96,500
September	9,160	16,200	2,840	7,790	52,500	4,550	2,130	2,750	97,900
October	9,500	15,500	2,840	7,790	56,300	4,090	2,130	2,750	101,000
November	10,100	16,200	2,840	7,790	54,600	3,650	2,130	2,750	100,000
December	8,870	15,500	2,840	7,790	45,400	3,650	2,130	2,750	88,900
Jan Jun.	59,200	115,000	17,000	46,700	357,000	25,600	12,800	16,500	650,000
Year total	112,000	208,000	34,000	93,500	664,000	49,300	25,500	33,000	1,220,000
1996:									
January	11,100	13,900	2,840	7,790	59,400	3,350	2,130	2,750	103,000
February	9,790	13,900	2,840	7,790	54,000	2,980	2,130	2,750	96,200
March	11,100	14,400	2,840	7,790	57,600	2,660	2,130	2,750	101,000
April	8,200 r/	13,700 r/	2,840	7,790	57,400 r/	4,240	2,130	2,750	99,100 r/
May	10,000 r/	16,800 r/	2,840	7,790	59,100	4,230	2,130	2,750	106,000
June	10,900	17,300	2,840	7,790	58,800	4,960	2,130	2,750	107,000
Jan Jun.	61,100	90,100	17,000	46,700	346,000	22,400	12,800	16,500	613,000

p/ Preliminary. r/ Revised.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Electrolytically refined and fire-refined scrap based on source of material at smelter level.

^{3/} Data no longer collected monthly; 1995 and 1996 data estimated based on 1994 annual data.

^{4/} Estimate based on 1994 annual data.

^{5/} Does not include an estimate, based on reported 1994 data. This comprises a monthly average of 2,930 tons from new scrap and 2,340 tons from old scrap of copper recovered from scrap other than copper-base.

 ${\it TABLE~6}$ PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

	Produ	ction	Shipn	nents	Stocks, er	nd of period
Period	Brass mills	Wire rod mills	Brass mills	Wire rod mills	Brass mills	Wire rod mills
1995: p/						
June	127,000	164,000	128,000	158,000	52,900	75,000
July	94,400	136,000	99,300	138,000	48,000	73,100
August	114,000	148,000	113,000	163,000	49,100	58,500
September	116,000	163,000	116,000	163,000	49,600	57,600
October	120,000	161,000	118,000	154,000	51,300	64,900
November	113,000	143,000	118,000	141,000	46,400	67,300
December	105,000	134,000	98,600	132,000	52,500	69,100
Jan Jun.	756,000	933,000	767,000	933,000	XX	XX
Year total	1,420,000	1,820,000	1,430,000	1,820,000	XX	XX
1996:						
January	120,000	146,000	122,000	147,000	50,100	68,200
February	128,000	155,000	130,000	158,000	48,800	64,900
March	144,000	173,000	142,000	161,000	51,300	76,200
April	131,000 r/	158,000 r/	133,000 r/	177,000 r/	49,400	57,600 r/
May r/	131,000	174,000	129,000	166,000	51,000	65,200
June	135,000	165,000	133,000	153,000	53,300	76,900
Jan Jun.	789,000	970,000	788,000	962,000	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

 ${\bf TABLE~7} \\ {\bf CONSUMPTION~OF~REFINED~COPPER~1/} \\$

(Metric tons)

Period and item	Wire rod mills	Brass mills 2/	Other plants 3/	Total
1995: p/				
June	171,000	45,100	3,920	220,000
July	143,000	30,600	3,920	177,000
August	171,000	43,500	3,920	219,000
September	169,000	44,400	3,920	218,000
October	163,000	44,000	3,920	211,000
November	150,000	44,400	3,920	198,000
December	132,000	40,700	3,920	176,000
JanJun.	1,020,000	285,000	23,500	1,330,000
Year total	1,950,000	533,000	47,000	2,530,000
1996:				
January	155,000	45,100	3,920	204,000
February	166,000	47,200	3,920	217,000
March	183,000	56,400	3,920	244,000
April	164,000 r/	47,500 r/	3,920	215,000 r/
May	185,000 r/	47,800 r/	3,920	237,000 r/
June:				
Cathodes	166,000	30,200	1,120	197,000
Wire bars		W	W	W
Ingots and ingot bars		2,190	1,750	3,940
Cakes and slabs		4,550	W	4,550
Billets and other	-	12,000	1,060	13,100
Total	166,000	48,900	3,920	218,000
JanJun.	1,020,000	293,000	23,500	1,330,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Billets and other."

 $^{1/\,\}mbox{Data}$ are rounded to three significant digits; may not add to totals shown.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} In 1994, brass mills consumed 2,670 tons of refined lead, 652 tons of pig tin, 3,340 tons of refined nickel, and 90,700 tons of slab zinc.

^{3/} Estimated consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers; based on 1994 annual data.

TABLE 8 U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

	Refined copper	Copper in	Net refined	Stock change	Apparent
Period	production	old scrap 2/	imports	during period	consumption
1995: p/					
June	157,000 r/	32,700	(1,090)	(6,490)	195,000 r/
July	156,000 r/	30,100	15,200	28,000	173,000 r/
August	166,000 r/	32,300	15,200	9,190	204,000 r/
September	160,000 r/	33,700	16,500	6,270	204,000 r/
October	167,000	32,500	29,600	(2,050)	231,000
November	171,000	32,700	31,900	5,380	231,000 r/
December	169,000	32,000	30,800	30,900	201,000
JanMay	765,000	185,000	73,300	(26,600)	1,050,000
Year total	1,920,000	411,000	211,000	44,500	2,490,000 r/
1996:					
January	176,000 r/	30,100	29,400	28,600	207,000 r/
February	160,000	29,800	24,800	(21,100) r/	236,000 r/
March	167,000	30,000	22,600	(7,330) r/	227,000
April	172,000 r/	30,800 r/	37,300	11,000 r/	229,000 r/
May	172,000 r/	33,900 r/	46,000	(26,500) r/	278,000
June	153,000	35,100	NA	(6,910)	NA
JanMay	847,000	155,000	160,000	(15,400)	1,180,000

p/ Preliminary. r/ Revised. NA Not available.

TABLE 9 CONSUMPTION OF PURCHASED COPPER-BASE SCRAP $\ 1/$

(Metric tons, gross weight)

	Smelter	rs			Brass and	1			
	and refine	eries	Ingot make	ers 2/	wire-rod mil	ls 3/	Foundries.	, etc. e/	Total scrap
Period	New scrap 2/	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
1995: p/									
June	11,100	31,500	3,800	11,600	71,400	5,160	2,400	3,100	140,000
July	7,680	28,000	3,800	11,600	56,400	4,360	2,400	3,100	117,000
August	11,900	30,000	3,800	11,600	65,100	4,790	2,400	3,100	133,000
September	10,600	31,600	3,800	11,600	64,900	5,460	2,400	3,100	133,000
October	10,800	29,800	3,800	11,600	70,100	4,950	2,400	3,100	136,000
November	12,300	29,400	3,800	11,600	68,300	4,380	2,400	3,100	135,000
December	10,100	31,800	3,800	11,600	57,100	4,460	2,400	3,100	124,000
Jan Jun.	65,100	204,000	22,800	69,600	445,000	31,000	14,400	18,600	870,000
Year total	128,000	385,000	45,600	139,000	827,000	59,400	28,800	37,200	1,650,000
1996:									
January	12,600	26,600 r/	3,800	11,600	74,300	4,100	2,400	3,100	138,000 r/
February	10,700	28,200 r/	3,800	11,600	68,200	3,830	2,400	3,100	132,000 r/
March	11,700	32,200 r/	3,800	11,600	72,300	3,570	2,400	3,100	141,000
April	9,680	26,800 r/	3,800	11,600	71,900 r/	5,000	2,400	3,100	134,000 r/
May	10,800	31,400 r/	3,800	11,600	74,500 r/	5,100	2,400	3,100	143,000
June	13,200	36,300	3,800	11,600	73,600	5,100	2,400	3,100	149,000
Jan Jun.	68,700	182,000	22,800	69,600	435,000	26,700	14,400	18,600	837,000

^{1/} Data are rounded to three significant digits; may not add to totals shown.
2/ Includes reported monthly production of copper from old scrap of copper-base and of non-copper-base materials and estimates for annual reporters based on 1994 data.

e/ Estimated. p/ Preliminary. r/ Revised.
1/ Data are rounded to three significant digits; may not add to totals shown.

^{2/} Data for 1995 and 1996 is estimated from 1994 annual data.

^{3/} Consumption at brass and wire-rod mills assumed equal to receipts.

${\it TABLE~10} \\ {\it CONSUMPTION~OF~PURCHASED~COPPER-BASE~SCRAP~1/~2/} \\$

(Metric tons, gross weight)

	1995 1	p/		1996		
Scrap type and processor	JanJun.	Year total	April	May	June	JanJun.
No. 1 wire and heavy:			•			
Smelters and refiners	81,800	145,000	9,960	12,200	13,500	71,900
Brass and wire-rod mills	198,000	375,000	32,100 r/	32,000 r/	32,600	186,000
No. 2 mixed heavy and light:						
Smelters and refiners	108,000	210,000	14,500 r/	17,800 r/	22,200	101,000
Brass and wire-rod mills	19,500	33,400	3,130	3,470	3,800	18,800
Total unalloyed scrap:						
Smelters and refiners	189,000	355,000	24,500 r/	29,900 r/	35,700	173,000
Brass mills	218,000	408,000	35,200 r/	35,400 r/	36,400	205,000
Red brass: 3/						-
All plants	13,000	24,500	1,960	1,920 r/	1,930	11,800
Leaded yellow brass:	·	·				
All plants	189,000	346,000	30,600	33,200 r/	32,600	188,000
Yellow and low brass:	·	·				
Smelters and refiners	(4/)	(4/)	(4/)	(4/)	(4/)	(4/)
Brass mills	22,200	47,500	3,820	4,150 r/	4,240	26,200
Cartridge cases and brass:	,	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	<u> </u>		
Smelters and refiners						
Brass mills	28,600	49,400	4,030	3,830	3,930	24,100
Auto radiators:	,	,	,	,	<u> </u>	,
Smelters and refiners	9,710	19,400	1,640	1,610	1,620	9,720
Bronzes:	·	·		·		
Smelters and refiners	- 					
Brass mills	5,880	11,300	1,000	811	905	5,690
Nickel-copper alloys:	,	<u> </u>	· · · · · · · · · · · · · · · · · · ·			,
Smelters and refiners	- 					
Brass mills	8,980	17,700	1,710	1,470 r/	1,010	10,300
Low grade & residues:	,	<u> </u>	· · · · · · · · · · · · · · · · · · ·	,		,
Smelters and refiners	39,900	80,900	5,450	5,300	6,960	37,600
Other alloy scrap: 5/	,	<u> </u>	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		,
Smelters and refiners	20,600	39,200	3,380	3,870	3,720	20,500
Brass mills	2,040	3,920	448	285	428	2,280
Total alloyed scrap:	,	,				,
Smelters and refiners	81,600	162,000	12,300	12,700	14,200	79,200
Brass mills	259,000	478,000	41,700	44,200 r/	43,200	257,000
Total scrap:	, -	,	,	,	*	,
Smelters and refiners	271,000	517,000	36,800 r/	42,600 r/	49,900	252,000
Brass and wire-rod mills	476,000	886,000	76,900 r/	79,600 r/	79,500	462,000
/D 1' ' /D ' 1	,	,	,	,	,	,

p/ Preliminary. r/ Revised.

^{1/} Does not include: consumption by ingot makers, foundries, chemical plants and miscellaneous manufacturers, estimated to total about 20,800 tons of scrap per month in 1995; consumption of home scrap at brass mills which averaged 57,200 tons per month in 1994; includes estimated consumption of 337 tons per month by several copper smelting plants that reported only on an annual basis in 1995.

^{2/} Data are rounded to three significant digits; may not add to totals shown.

^{3/} Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal and commercial bronze.

^{4/} Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap."

^{5/} Includes refinery brass, beryllium copper, phosphor copper and aluminum bronze.

TABLE 11 COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

				Refir	ned copper			
	Crude		Wire rod					Total
Period	copper 2/	Refineries 3/	mills 3/	Brass mills 3/	Other 4/	Comex 5/	LME 6/	refined
1995: p/								
June	176,000 r/	36,900	22,700	10,500	4,100	11,900		86,100
July	184,000	36,800	29,000	14,700	4,100	15,100	14,300	114,000
August	176,000	36,200	27,900	12,000	4,100	14,900	28,000	123,000
September	170,000	38,500	24,900	11,500	4,100	10,100	40,300	129,000
October	180,000	39,600	24,900	12,100	4,100	5,540	41,200	127,000
November	170,000	37,900	26,700	11,700	4,100	4,900	47,500	133,000
December	174,000	38,000	24,800	7,110	4,100	21,500	68,200	164,000
1996:								
January	172,000	35,700	34,500	10,400	4,100	11,000	96,700	192,000
February	174,000	31,900 r/	22,600	11,200	4,100	11,700	89,600	171,000 r/
March	150,000	33,800 r/	19,500	9,820	4,100	12,600	84,000	164,000 r/
April	167,000 r/	35,800 r/	25,500	11,300 r/	4,100	18,800	79,400	175,000 r/
May	163,000 r/	35,700 r/	19,200 r/	9,720 r/	4,100	12,000	67,500	148,000 r/
June	158,000	34,600	13,100	12,200	4,100	6,880	70,400	141,000

p/ Preliminary. r/ Revised.

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ Copper content of blister and other materials in transit and in process of refining.
- $3/\,Stocks$ of refined copper as reported; no estimates are made for non-respondents.
- 4/ Monthly estimates based on reported and 1994 annual data, comprising stocks at secondary smelters, chemical plants, foundries, and miscellaneous manufacturers.
- 5/ Commodity Exchange Inc., New York.
- 6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12 AVERAGE PRICE OF COPPER IN THE UNITED STATES AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

	U.S. producers deliv	ered price	Comex	L.M.E. cash price
Period	Cathode 1/	Wirebar 2/	first position 3/	Grade A
1995:				
June	141.139	149.511	137.759	135.798
July	141.383	150.003	138.003	139.461
August	141.128	149.774	137.774	137.718
September	135.518	144.138	132.138	132.216
October	131.380	139.995	127.996	127.582
November	139.860	148.500	136.500	134.986
December	135.103	143.778	131.778	132.683
Average	138.333	146.724	134.717	133.1215
1996:				
January	121.431	130.090	118.091	118.622
February	120.020	128.668	116.668	115.077
March	121.540	130.200	118.200	116.140
April	122.628	131.286	119.286	117.707
May	126.667	135.327	123.327	120.527
June	107.828	116.538	104.488	98.447
Average	120.019	128.685	116.677	114.420

^{1/} Listed as "U.S. producer cathode."

Sources: Platt's Metals Week and American Metal Market.

^{2/} Listed as "Electrolytic wirebar (Warrenton Refining Co.)."

^{3/} Listed as "Comex high grade first position."

${\it TABLE~13}$ NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealers (New York)				
	Brass mills	Refiners		Red brass turnings and borings			
Month	No. 1 scrap	No. 2 scrap	No. 2 scrap				
1995:							
June	126.16	108.44	90.91	63.82			
July	126.07	109.62	94.05	66.58			
August	126.68	110.77	95.00	68.00			
September	122.59	105.99	94.10	68.00			
October	120.17	104.50	92.27	67.00			
November	125.91	106.96	91.80	66.00			
December	120.89	103.96	92.00	66.00			
Average	123.28	104.73	91.26	63.38			
1996:							
January	112.46	95.09	87.98	57.86			
February	111.85	93.83	89.75	57.00			
March	113.06	96.54	92.53	57.66			
April	114.20	96.99	84.43	58.00			
May	116.25	97.10	84.59	57.84			
June	96.95	83.00	77.85	55.35			
Average	110.79	93.76	86.19	57.29			

Source: American Metal Market.

 ${\it TABLE~14} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~COPPER~(UNMANUFACTURED),~BY~CLASS~1/}$

(Metric tons, copper content)

	Ore and concentrate			Matte, ash and precipitates			Blist	ter and anod	es	Refined			
Country or	1996				1996			199	6		1996		
territory	1995	May .	JanMay	1995	May	JanMay	1995	May	JanMay	1995	May	JanMay	
Brazil										15,500	6,590	11,600	
Canada	(2/)			590	31	50	40,000	(2/)	2,610	283,000	29,600	153,000	
Chile	80,400	20,000	32,500				38,000	5,900	20,000	29,100	9,550	28,300	
Germany										12,300		(2/)	
Japan				4			(2/)			7,740	32	739	
Kazakstan											1,110	1,110	
Malaysia				55	1	77							
Mexico	11,700		275	2,190	330	1,060	2,350		14,300	58,600	4,530	18,900	
Peru	34,900						10,400			9,860	1,000	18,400	
Russia										11,600	4,360	4,360	
South Africa	1			11					638	2			
Spain							3,260	560	1,730				
Taiwan				1	9	14							
Other	1			2		1		1	1	618	92	2,340	
Total	127,000	20,000	32,700	2,860	372	1,200	94,100	6,460	39,300	429,000	56,800	239,000	

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 $^{2/\} Less$ than 1/2 unit.

 ${\it TABLE~15} \\ {\it U.S.~EXPORTS~OF~COPPER~(UNMANUFACTURED),~BY~CLASS~1/}$

(Metric tons, copper content)

	Ore	Ore and concentrate 1996			Matte, ash and precipitates			lister and anode	s	Refined		
Country or					1996		1996				1990	1996
territory	1995	May	JanMay	1995	May	JanMay	1995	May	JanMay	1995	May	JanMay
Belgium	1,980			1,330	3	3	81			2,260	8	26
Canada	123,000	13,600	40,500	30,400	2,530	15,700	24,800	1,620	9,270	22,900	2,020	11,500
China	37,100	6,630	41,400	17			211		20	5,130		
Germany				152			84	38	264	629		52
Hong Kong			16	48		29	650	59	313	4,710	68	284
India				151		271	36			138		7
Italy			8				245	20	365	1,580	20	2,090
Japan	53,500		5,530	1,880	822	1,620	363	180	332	52,800	2,210	10,100
Korea, Republic of	5,520		2	10	10	10	1,440	14	420	11,200	12	1,510
Malaysia										4,110	93	4,320
Mexico	160	1,190	2,320	763	5	186	219	17	157	2,710	84	2,540
Peru	1,180		1,750	9								129
Philippines	16,000						20	8	8	3		
Singapore	_ 5			18			39	37	37	12,700		523
Taiwan				201			137	23	161	75,000	4,190	19,700
Thailand	34						124	40	58	18,700	2,040	12,800
Venezuela							860	6	6	27		20
Other	341		171	69	103	198	190	17	188	2,890	77	512
Total	239,000	21,500	91,700	35,100	3,480	18,000	29,500	2,080	11,600	217,000	10,800	66,000

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 16 U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

	Imports							Exports						
		Unalloyed		Alloyed				Unalloyed		Alloyed				
Country or		19	196		1996			1996			1996			
territory	1995	May	JanMay	1995	May	JanMay	1995	May	JanMay	1995	May	JanMay		
Belgium	11			294			2,730	580	1,220	32				
Canada	36,600	3,820	16,300	64,600	5,910	25,500	110,000	11,600	47,100	30,300	2,430	12,200		
Chile	9,270	748	4,000	66	39	110						3		
China				21	2	62	28,000	1,250	6,280	7,380	224	863		
Colombia	325	39	382	1,280	181	1,700						-		
Costa Rica	848	59	416	524	14	133						-		
Dominican Republic	702	10	236	1,860	215	965								
Germany		1	2	64		42	1,580	51	291	1,190	63	309		
Honduras	67	29	154	891	130	399						-		
Hong Kong				23	(2/)	111	31,400	3,270	13,500	7,810	742	3,550		
India							7,100	327	2,340	25,400	1,210	7,560		
Japan				124		2	20,100	1,960	6,230	3,870	470	1,230		
Korea, Republic of				14			10,300	571	2,830	1,480		140		
Mexico	32,800	2,950	13,700	50,500	4,870	21,700	6,470	657	2,070	37				
Panama	1,170	92	357	776	106	477						-		
Taiwan			29	2,940	187	665	1,680	23	284	832	101	399		
Thailand				8		20			17	827	20	262		
Venezuela	3,260	390	1,720	2,860	151	1,380								
Other	3,040	386	1,880	6,710	967	4,020	3,920	83	332	1,490	19	265		
Total	88,100	8,530	39,200	134,000	12,800	57,300	223,000	20,400	82,500	80,600	5,280	26,800		

r/ Revised.

Source: Bureau of the Census.

^{1/} Data are rounded to three significant digits; may not add to totals shown.